

## ABSTRACT

A process of producing a maraging steel includes melting a steel of a defined composition, casting the molten steel to obtain a steel ingot, hot forging the steel ingot at a forging ratio of at least 4, then soaking the forged piece one or more times to keep the forged piece in a temperature range of 1100-1280°C for 10-100 hours, and then plastic working the forged piece. A process of producing a maraging steel of another defined composition includes casting the molten steel to obtain a steel ingot with a defined taper, a defined height to diameter ratio and a defined flatness ratio and plastic working the steel ingot so that the size of a nonmetallic inclusion is 30  $\mu\text{m}$  or less expressed as the diameter of a circle of circumference equal to the perimeter ("circumference") of the inclusion.